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Pharmacy Performance Based on Financial Perspective Before and During COVID-19 Pandemic : A Case Study

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ABSTRACT

A pharmacy, aside from being a pharmaceutical care provider is also a functioning business. Thus, in the scope of business, pharmacy performance can be analysed using liquidity, activity, and profitability ratios. This study aimed to determine the performance of Pharmacy X based on a financial perspective before and during the COVID-19 pandemic. This research is a descriptive cross-sectional study that employed data obtained from sales and purchase records. The data were analysed using financial ratio analysis methods, including liquidity, activity, and profitability ratios. This study was conducted at Pharmacy X based on the amount of prescription and non-prescription income from before the COVID-19 pandemic (in 2019) and during the pandemic (in 2020). The results showed that Pharmacy X was not good at managing its current assets and current liabilities during the COVID-19 pandemic. Based on the results for the ratios of total asset turnover and fixed asset turnover, asset utilisation was less efficient. Analysis of the probability ratios and net profit margin showed a decrease in Pharmacy X's profit during the pandemic. The Return on Assets (ROA), Return on Equity (ROE), and Return on Investment (ROI) values indicated that the business was less able to generate profits and net income from its invested capital.

Keywords: *: pharmacy performance; COVID-19; financial perspective*

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INTRODUCTION

As a pharmaceutical service facility, a pharmacy has two functions, namely health service and as a profit-generating business (Hamdani, 2016). Every business can run smoothly if it keeps a close eye on its performance. Performance can be defined as the level of success in carrying out obligations and the ability of a business to achieve its determined objectives (Murtizanah, 2015; Veronica & Koto, 2020). The world remains wary about the spread of COVID-19, which has created widespread turmoil since 2020. The COVID-19 pandemic has impacted all aspects of life, including the economic aspect (Regmi, 2020; Yamali & Putri, 2020). During the pandemic, many businesses, including pharmacies, have seen their performance decline (Kustiyono et al., 2022; World Health Organization, 2020). Therefore, pharmacy owners must organise their management to prevail in such challenging situations and maintain their functions as a pharmaceutical service and means of business (Zheng et al., 2021).

Pharmacy X is located in Padangsidimpuan, the capital city of South Tapanuli. Padangsidimpuan is one of the largest cities in North Sumatra, which is both socially and culturally diverse. Pharmacy X occupies a strategic location in the densely populated centre of the city. It is also situated immediately next to Padangsidimpuan Regional General Hospital, which makes it easily accessible for both the public and hospital patients. The pharmacy not only provides drug services and medical supplies but also cooperates with hospitals and clinics in providing medications and medical equipment. Pharmacy X has recorded profit growth in line with that of the number of drugs and medical supplies. However, the pandemic led to a fall in the number of patients visiting the pharmacy. This coincided with a limit on the number of visitors to doctor's clinics, thus contributing to a decline in turnover for many pharmacies during the pandemic (Nugroho & Pratiwi, 2021). For these reasons, the author would like to investigate, through a case study, pharmacy performance from a financial perspective before and during the COVID-19 pandemic.

METHODS

This research is a descriptive cross-sectional study that was conducted from January to February 2021 by collecting sales and purchase records made by Pharmacy X in 2019 before the COVID-19 pandemic and in 2020 during the COVID-19 pandemic. The data obtained were processed using the Microsoft Excel, presented in tabular form, and analysed using the financial ratio analysis method, including liquidity ratios, activity

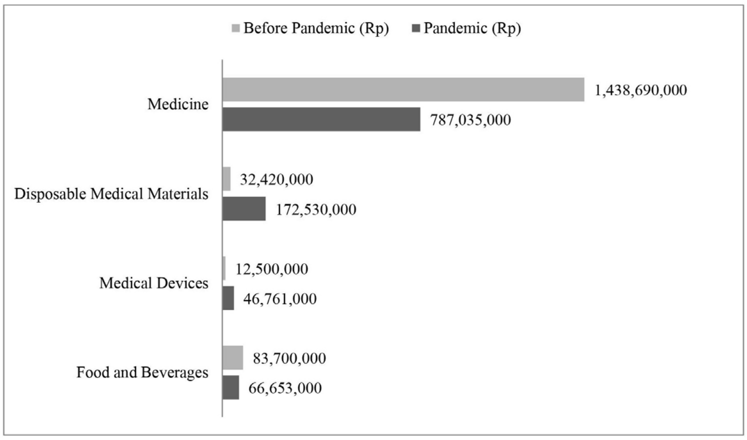

Figure 1. Purchase of goods report

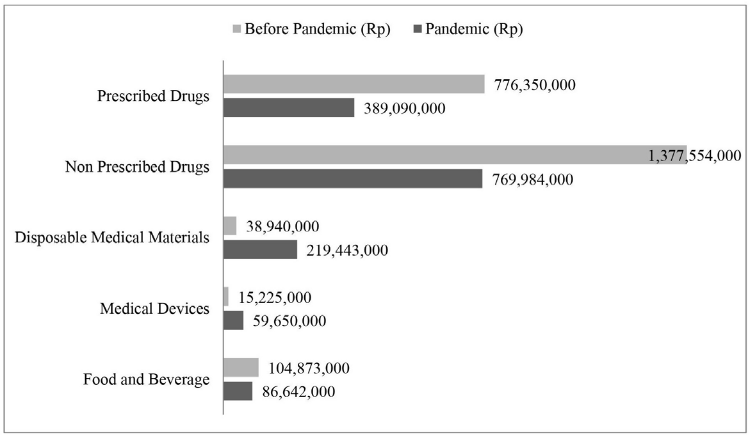

Figure 2. Sales of goods report

ratios, and profitability ratios (Asmi & Haris, 2020). The data is presented in Indonesian Rupiah (IDR/Rp).

RESULTS AND DISCUSSION

Purchases of medicine and food and beverages fell during the pandemic, decreasing by 45.3% and 20% respectively, while the purchase of medical devices and medical consumables showed a more than threefold increase compared to before the pandemic. This reflected the widespread panic-buying of medical equipment, masks, and hand sanitiser (Yuliana, 2020) prompted by the COVID-19 outbreak that began to affect Indonesia in early 2020. The data can be seen in Figure 1.

Sales of prescription and non-prescription drugs and food and beverages also decreased during the pandemic. The most drastic fall was seen in drug sales, which declined by 46% compared to before the pandemic. This reflected the pandemic's impact, whereby consumers felt that their primary need involved products that they perceived would help in preventing and protecting them from the transmission of COVID-19, including supplements, vitamins, and health drinks (Gunawan & Rakhmat, 2020). Sales of disposable medical materials and medical devices showed a threefold increase compared to before the pandemic due to the socialisation conducted by the government for COVID-19 prevention (Figure 2). People were encouraged to keep their distance, use personal protective equipment, and wash their hands (Chuzairi et al., 2021). Social media plays a role in providing information regarding panic buying of medical devices and consumable medical materials in other areas. This sparked panic buying in other areas. misinformation also increases consumer panic in buying products. Panic buying of medical devices and consumables also occurs worldwide (Arafat et al., 2020; Naeem, 2021).

Table 1 presents the profit and loss statement for Pharmacy X before and during the COVID-19 pandemic. It can be seen that turnover decreased by around 34% (Rp788,133,000), which was due to poor sales during the pandemic. The cost of goods sold, gross profit and net profit also fell by around 32% (Rp627,633,000), 44% (Rp160,500,000) and 62% (Rp159,300,000) respectively. All of these declines were

Table 1. Profit and loss statement (Rp)

Report	Before Pandemic (2019)	Pandemic (2020)	Difference
Early year items	230,785,000	150,550,000	80,235,000
Purchase of goods	1,567,310.000	1,072,979,000	494,331,000
Total goods one year	1,798,095,000	1,223,529,000	574,566,000
End of year items	150,550,000	97,483,000	53,067,000
Cost of gold sold	1,948,645,000	1,321,012,000	627,633,000
Turn over	2,312,942,000	1,524,809,000	788,133,000
Gross profit	364,297,000	203,797,000	160,500,000
Inventory depreciation	7,863,332	7,863,332	0
Consumable medical device	3,000,000	1,800,000	1,200,000
Salary expense	96,000,000	96,000,000	0
Net profit	257,433,668	98,133,668	159,300,000

Table 2. Income statement before and during pandemic (Rp)

Assets	Before Pandemic	Pandemic	Difference
Cash Balance/ Bank	609,662,000	813,224,000	-203,562,000
Goods	150,550,000	97,483,000	53,067,000
Inventory	36,600,000	36,600,000	0
Total Assets	796,812,000	947,307,000	-150,495,000
Passive	**Before Pandemic**	**Pandemic**	**Difference**
Capital	187,150,000	134,083,000	53,067,000
Profit 2018	245,600,000	245,600,000	0
Profit 2019	364,062,000	364,062,000	0
Profit 2020		203,562,000	203,562,000
Total Passive	796,812,000	947,307,000	-150,495,000

due to the challenging economic circumstances facing the community during the pandemic. The COVID-19 pandemic has caused a decrease in people's income due to the difficulty of the economy coupled with the many layoffs. Moreover, reduced supply from factories and logistics led to an increase in the price of goods (Malden & Stephens, 2020).

Table 2 indicates that the cash balance rose by around 33% (Rp203,562,000) during the pandemic compared to the pre-pandemic period, due to the net profit earned. The pharmacy had a stronger cash balance during the pandemic due to healthy sales. The total goods figure before the pandemic period was Rp150,550,000 compared to Rp97,483,000 during the pandemic period, which equates to a decrease of around 35% (Rp53,067,000). This was caused by the lack of medicines, disposable medical materials and medical devices in the market due to high demand (Rokhmah et al., 2020).

Accounting theory known as the non-articulated approach states that the balance sheet and income statement are mathematically independent of each other (Sari, 2015). From this, it can be concluded that the year-end balance sheet is good if the assets and liabilities are in balance. Liquidity analysis describes the ability of firms to meet their short-term obligations. The current ratio was thus used to measure the pharmacy's ability to pay its current liabilities by dividing existing assets by current liabilities (Kaplan, 2019; Saini & Bansal, 2020).

Table 3 shows an increase in the current ratio of 1% in 2020, during the pandemic, compared to 2019, i.e. before the pandemic. This indicates that the business is adept at managing its current assets since the higher the ratio, the greater its ability to meet short-term financial obligations (Raymond, 2017). In terms of total assets turnover, net sales before the pandemic of around Rp1,948,645,000, combined with total assets of Rp796,812,000, produced

Table 3. Analysis of financial ratios

Analysis	Before Pandemic (Rp)	Pandemic (Rp)
Liquidity		
1. Current Assets	760,212,000	910,707,000
2. Current Liabilities	796,812,000	947,307,000
3. Ratio	0.95	0.96
Activity		
a. Total asset turnover		
1. Net sales	1,948,645,000	1,321,012,000
2. Total assets	796,812,000	947,307,000
3. Ratio	2.44	1.39
b. Fixed asset turnover		
1. Net sales	1,948,645,000	1,321,012,000
2. Net fixed assets	36,600,000	36,600,000
3. Ratio	53.24	36.1
Profitability		
a. Net profit margin	257,433,668	98,133,668
1. Net profit	257,433,668	1,321,012,000
2. Net sales	0.13	0.07
3. Ratio		
b. Return on Asset (ROA)		
1. Gross profit	364,297,000	203,797,000
2. Total assets	796,812,000	947,307,000
3. Ratio	0.45	0.21
c. Return on Equity (ROE)		
1. Net profit	257,433,668	98,133,668
2. Capital	187,150,000	134,083,000
3. Ratio	1.37	0.73
d. Return on Invesment (ROI)		
1. Net profit	257,433,668	796,812,000
2. Total assets	98,133,668	947,307,000
3. Ratio	0.32	0.10

and pandemic periods. This comparison of net sales with total assets demonstrates a relative decline in the pharmacy's ability to generate sales from its total assets. A higher total asset turnover ratio indicates a faster turnover of goods at the pharmacy, thereby increasing the ability to earn greater profits due to the efficient utilisation of assets to generate sales (Kasmir, 2018). The fixed assets turnover ratio decreased during the pandemic by 32% (17.14 percentage points) compared to before the pandemic. This indicates that the pharmacy was less effective in using its fixed assets to generate profit. Good fixed asset management is thus critical for the pharmacy to survive in difficult conditions (Kasmir, 2018; Malden & Stephens, 2020). The application of asset management in the company is useful for reducing non-optimal expenses and increasing income. Other benefits of asset management are maintaining asset value with careful planning, the company can reduce the risk of losing the value of its assets due to loss or damage. The application of asset management is useful for keeping assets safe and avoiding the risk of being lost or damaged. The company's asset management information system allows the company to know the condition of the assets so that the budgeting process is more practical and flexible. Another benefit of asset management is that it prevents the purchase of excess assets where companies can prepare budgets based on priorities and reduce costs. Although it can manage assets and prevent the company from experiencing losses, asset management cannot predict future threats. Therefore, the application of asset management must be complemented by the creation of risk management to help companies manage the uncertainty of their assets in the future. Depreciation of assets is something that companies have to watch out for. If it is used continuously, the asset will decrease in quality both in terms of function and value. Therefore, the role of asset management is to monitor assets, which is very much needed (Gavrikov et al., 2020).

Profitability analysis can also be used to describe the pharmacy's ability to earn a profit from all available funds and sources of funds. This analysis is aimed at detecting the cause of the profit or loss generated by each type of product within a certain period. This reflects how profit is the main factor in measuring the level of effectiveness and efficiency of a business. Net profit margin is used to analyse the finances of a business. The pharmacy recorded a decrease of 46% (0.06 percentage points) in its net profit margin ratio during the pandemic compared to before the pandemic, thus demonstrating its reduced ability to generate profit (Kasmir, 2018).

Return on Assets (ROA) is used to measure the ability and overall development of a business and is a benchmark for the profits derived from it. ROA can also be used to assess the potential of investment to generate the expected level of profit. The value of the ratio between the profits obtained by the company with the use of assets of more than 2% can illustrate that the ability to earn net income is higher than the assets of the company used (Jang & Ahn, 2021). Table 3 shows ROA ratios of 0.45 and 0.21 before and during the pandemic, respectively, meaning ROA fell by 53%. As such, the pharmacy was less effective in utilising its assets to generate profits (Rahmani, 2020).

Return on Equity (ROE) is used to measure the financial performance of a business. However, since debt is not included in the formulation and analysis of ROE, many businesses prefer to use ROA. Table 3 shows that the business had an ROE ratio of 1.37 before the pandemic, which then fell by 46% (to 0.74 percentage points) during the pandemic. This indicates that the pharmacy was less effective in terms of managing its available capital to generate income. An ROE value closer to 1 would indicate the pharmacy's effective and efficient use of equity to generate income (Kasmir, 2018).

ROI is used to measure the overall rate of return on investment in the applicable business. A positive ROI indicates that the investment in an asset is still good. Table 3 shows that the business experienced a fall of 69% in its ROI ratio during the pandemic compared to before the pandemic. However, despite this sharp fall, ROI remained positive (at 0.10); therefore, the investment continued to perform favourably (Kasmir, 2018).

Pharmacy X has a current ratio of less than 2, thus indicating that has not been good at managing its current assets and current liabilities. Total asset and fixed asset turnover also fell in 2020 compared to before the pandemic, meaning the business became less efficient in using its assets. The profitability ratios, including net profit margin, ROA, ROE, and ROI also declined during the pandemic compared to the pre-pandemic period, indicating that it was less efficient at generating net profits from the capital invested in overall assets.

This study has a couple of noteworthy limitations. First, because this is a case report study, which cannot represent the overall population, it is impossible to conclude that every pharmacy or business will have experienced a decrease in turnover during the COVID-19 pandemic. Additionally, it was difficult to obtain the requisite permission from pharmacies to analyse their performance due to the confidentiality and commercial sensitivity surrounding potential financial problems.

CONCLUSION

Pharmacy X showed a stronger financial performance during the pre-pandemic period than during COVID-19 pandemic. This was evident from examination of the firm's liquidity, activity, fixed assets turnover, and profitability ratios, along with its ROA, ROE, and ROI all of which decreased during the pandemic.

CONFLICT OF INTEREST

There are no conflicts of interest stated by the authors.

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